

## Process for producing polyesters

**Description of Technology:** This invention involves a process for the production of a polyester which comprises heating and agitating a mixture of one or more polymerizable monomers, oligomers, or lower molecular weight polyesters in a mixture of a solvent and a non-solvent, at a temperature of about 150.degree. C. or higher, while codistilling a polymerization by-product, the solvent and the non-solvent, or the solvent, or the non-solvent, from the mixture; provided that a polyester product and the solvent form a liquid phase separate from a phase formed predominantly by the non-solvent at said temperature.

## **Patent Listing:**

**US Patent No.** 5,602,199, Issued on February 11, 1997, "Process for producing polyesters." <a href="http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&co1=AND&d=PTXT&s1=5,602,199.PN.&OS=PN/5,602,199&RS=PN/5,602,199</a>

**Market Potential**: Disclosed herein is a process for the manufacture of polyesters which involves heating polymerizable monomers, oligomers or low molecular weight polyesters in a mixture of a solvent and a non-solvent and is particularly useful for producing high molecular weight polyesters. Polyesters are used in numerous commercial applications such as fibers, films, molded plastics and coatings. The preparation of such products by conventional melt polymerization methods is limited by the high viscosity of the melt.

## **Benefits:**

Useful for producing high molecular weight polyesters.

## **Applications:**

- Fibers.
- Films.
- Molded Plastics.
- Coatings.